

**REMARKS**

Claims 1-40 are pending and under consideration.

In a conventional apparatus or method that operates in a relative mode, a distance between coordinate values is not calculated or output immediately before a detachment and after a reattachment of an input device, that is, a distance corresponding to a period during which the input device remains out-of-contact with a surface of the input unit.

According to aspects of the present invention, a distance, e.g., difference between coordinate values is calculated and output immediately before a detachment and after a reattachment of an input device in a relative mode. Thus, previous and current inputs are prevented from being displayed successively. (See, for example, FIGs. 2A and 2B of the present application).

**CITED ART IS NONANALOGOUS ART AND REJECTIONS OF CLAIMS 17-32 UNSUPPORTED**

Hirayama teaches (col. 1, lines 51-55) a data processing apparatus in which "a user can activate or deactivate a designated function by the user when the user drags a pen." Furuhashi et al. teaches (col. 2, lines 46-48) "touch input systems using fingers."

At an in-person interview conducted March 2, 2004, the Examiner indicated that the art cited by the Examiner at that time, e.g., Hirayama and Furuhashi, did not teach a writing device or detecting writing characters. Newly cited art Dunthorn teaches (col. 2, starting at line 51) a touch screen and touch pad device, and does not teach "writing".

Independent claims 17 and 25 (and respective dependent claims 19-20 and 27-28) filed on April 5, 2004 are directed to a writing device. Independent claims 21 and 29 (and respective dependent claims 23-24 and 30-32) are directed to a method of detecting coordinates of a writing character.

Applicant submits that the currently cited art is nonanalogous art and does not teach features of a writing device or a method of detecting coordinates of a writing character. The Examiner does not contend in the current Action that the cited art alone or in combination is teaches a "writing device" or a method of detecting coordinates of a "writing character" with regard to the rejection of any claim.

**Conclusion**

Since the cited art is nonanalogous art and rejections of claims 17-32 are unsupported, claims 17-32 should be allowed.

**ITEM 2: REJECTION OF INDEPENDENT CLAIM 1 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA ET AL. (U.S.P. 5,406,307) IN VIEW OF DUNTHORN (U.S.P. 4,914,624)**

Independent claim 1 recites a coordinate detection device including "an input unit, having

a surface thereof, to which a coordinate value is input by an input device; a calculation unit calculating a distance between coordinate values of previous and current input operations by said input unit, the coordinate values being successive over detachment of the input device from the surface of said input unit; and a setting unit setting, in said calculation unit, a coordinate value at a time when the input device is detached from the surface of said input unit as the coordinate value of the previous input operation."

**Prima Facie Obviousness Not Established**

**Features Not Described By Cited Art Alone Or In Combination**

As provided in MPEP §2143.03 "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F. 2d 1981, (CCPA 1974). The Action concedes that Hirayama does not teach:

... (a setting unit setting) that the coordinate values before and after the input means (3) is detached and that Hirayama does not teach calculating the distance between coordinate values of a previous and current input.

(Action at page 3).

Nevertheless, the Examiner rejects claim 1 and contends that it would have been obvious:

... to include the teaching (of) Dunthorn's device having the user able to enter successive input to be incorporated to Hirayama's device so as to be able to extend the functionality of touch to create discrete functions like creating virtual buttons, and therefore, increasing the versatility of the device ... to also include the teaching of measuring the distance between the first and the second inputs, so as to measure the relative locations between the two input for certain input requirement, and thus increasing the accuracy of the device.

(Action at pages 3-4).

Applicant submits that the Examiner's conclusory contentions are unsupported, and, even if such arguments were *arguendo* supported, they do not teach the recited features. Dunthorn does not teach, alone or in combination, "coordinate values being successive over detachment of the input device from the surface of said input unit; and a setting unit setting, in said calculation unit, a coordinate value at a time when the input device is detached from the surface of said input unit as the coordinate value of the previous input operation." Dunthorn merely teaches (col. 6, lines 48-51):

... if before the forefinger is removed from the location 22, the user's thumb is brought into contact with the screen 16 at a location 24 [29], a virtual push button at location 26 is thereby established.

That is, Dunthorn teaches that by performing an input operation with the thumb, i.e., a current input operation without canceling the input operation with the forefinger, i.e., a previous input operation that a distance between the locations 22 and 24 is calculated so that the virtual

push button is created at the location 26. Dunthorn does not teach a detachment of an input device, i.e., the forefinger between the two input operations. Dunthorn merely teaches a detection operation according to the conventional relative mode.

In addition, Dunthorn teaches away from a calculation when an input device is detached (col. 6, lines 43-47):

(i)f the user's forefinger is removed from the location 22, then an untouch action is detected, and this action may be used to select the function or operation called to the screen when the location 22 was originally touched.

That is, when the user's forefinger, i.e., input device, is detached from a location, a calculation of the distance from the location is not performed.

### **Conclusion**

Since features of independent claim 1 are not taught or suggested by the prior art, the rejection should be withdrawn, and independent claim 1 allowed.

### **ITEM 3: REJECTION OF DEPENDENT CLAIM 2 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA IN VIEW OF DUNTHORN**

The Examiner rejects dependent claim 2 under 35 U.S.C. §103(a) over Hirayama in view of Dunthorn. (Action at page 4).

Dependent claim 2 recites a coordinate detection device including "a determination unit that determines an operation mode as a relative mode or an absolute mode of said input unit; and a control unit that enables or disables said setting unit based on a determination result of said determination unit."

The cited art, alone or in combination, does not teach a control unit that enables or disables the setting unit based on the determination result. The Examiner does not cite either Hirayama or Dunthorn as discussing or suggesting this feature.

Since features of dependent claim 2 are not taught or suggested by the prior art, the rejection should be withdrawn and dependent claim 2 allowed.

### **ITEM 3: REJECTION OF DEPENDENT CLAIM UNDER 35 U.S.C. §103(a) OVER HIRAYAMA IN VIEW OF DUNTHORN**

The Examiner rejects dependent claim 3 under 35 U.S.C. §103(a) over Hirayama in view of Dunthorn. (Action at page 4).

Dependent claim 3 recites a coordinate detection device "wherein said determination unit determines the operation mode of said input unit based on a relative contact area formed by a contact of the input device with the surface of said input unit." (Emphasis added).

Hirayama teaches only a single contact pen mechanism, and Dunthorn teaches contact with a finger. The cited art does not teach, nor does the Examiner contend that the art teaches, an operation mode based on a relative contact area.

Since features of dependent claim 3 are not taught or suggested by the prior art, the rejection should be withdrawn and dependent claim 3 allowed.

**ITEM 2: REJECTION OF CLAIMS 5, 9, 13, 17, 21, 25, 29, 33 AND 37 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA IN VIEW OF DUNTHORN**

The Examiner rejects independent claim 5, 9, 13, 17, 21, 25, 29, 33 and 37 under 35 U.S.C. §103(a) over Hirayama in view Dunthorn as discussed with respect to the rejection of claims 1. (Action at page 4).

Independent claims 5, 21, and 33 recites a method of detecting coordinates, a method of detecting coordinates of a writing character, and a computer-readable recording medium including "calculating a distance between coordinate values of previous and current input by said inputting, the coordinate values being successive over detachment of the input device from the surface of said input unit; and setting, in said calculating, a coordinate value input at a time when the input device is detached from the surface of the input unit as the coordinate value of the previous input operation."

Independent claims 9, 17, 25 recite a coordinate detection device and a writing device, including a calculation unit (calculator) "calculating a distance between a coordinate value of a first input operation and a coordinate value of a second input operation; and a setting unit setting, in said calculation unit, the coordinate value of the first input operation as the final coordinate value input of the first input operation."

Independent claims 13, 29, and 37 recite a method of detecting coordinates, a method of detecting coordinates of a writing character, and a computer-readable recording medium that stores a method of detecting coordinates including "setting a coordinate value of a first inputting as the final coordinate value input of the first inputting if a second inputting has not occurred for a predetermined time; and calculating a distance difference between the set coordinate value of the first inputting and an initial coordinate value of the second inputting."

As Applicant argued above, the cited art alone or in combination does not recite features regarding claim coordinate values being successive over detachment of an input device from a surface of an input unit; and setting a coordinate value at a time when the input device is detached from the surface of the input unit as the coordinate value of the previous input operation.

The cited art, alone or in combination, does not teach a control unit that enables or

disables the setting unit based on a determination result. The Examiner does not cite either Hirayama or Dunthorn as discussing or suggesting this feature.

In addition as discussed above the cited art is nonanalogous regarding features of claims 17 and 25 that are directed to a writing device, and claims 21 and 29 that are directed to a method of detecting coordinates or a writing character.

#### **Conclusion**

Since features of independent claims 5, 9, 13, 17, 21, 25, 29, 33 and 37 are not taught or suggested by the prior art, the rejection should be withdrawn, and independent claims 5, 9, 13, 17, 21, 25, 29, 33 and 37 allowed.

#### **ITEM 2: REJECTION OF DEPENDENT CLAIMS 6, 10, 14, 18, 22, 26, 30, 34 AND 38 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA IN VIEW OF DUNTHORN**

The Examiner rejects dependent claims 6, 10, 14, 18, 22, 26, 30, 34 and 38 under 35 U.S.C. 103(a) over Hirayama in view Dunthorn as discussed with respect to the rejection of claim 2. (Action at page 4).

Dependent claims 6, 14, 22, and 30 recite a method, and dependent claims 34 and 38 recite a computer-readable recording medium including "determining an operation mode of (said) inputting as a relative mode or an absolute mode, and enabling or disabling said setting based on (a determination result of) said determining. Dependent claims 10, 18, and 26 recite a coordinate detection device and a writing device, respectively, including "a determination unit determining an operation mode of said input unit as a relative mode or an absolute mode; and a control unit (controller) enabling or disabling said setting unit based on a determination result."

As Applicant discussed above in traversing the rejection of claim 2, the cited art, alone or in combination, does not teach a control unit or controller that enables or disables the setting unit based on a determination result. The Examiner does not cite either Hirayama or Dunthorn as discussing or suggesting this feature.

In addition as submitted above, the cited art does not teach features of a writing device as recited in claims 18 and 26 or a method of detecting coordinates of a writing character as recited in claims 22 and 30.

#### **Conclusion**

Since features of dependent claims 6, 10, 14, 18, 22, 26, 30, 34 and 38 are not taught or suggested by the prior art, the rejection should be withdrawn and dependent claims 6, 10, 14, 18, 22, 26, 30, 34 and 38 allowed.

**ITEM 2: REJECTION OF CLAIMS 7, 11, 15, 19, 23, 27, 31, 35 AND 39 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA IN VIEW OF DUNTHORN**

The Examiner rejects dependent claims 7, 11, 15, 19, 23, 27, 31, 35 and 39 under 35 U.S.C. 103(a) over Hirayama in view Dunthorn as discussed with respect to claim 3. (Action at page 4).

Dependent claims 7, 15, 23, and 31 recite a method including determining "based on a relative size of a contact area." Dependent claim 11 recites a coordinate detection device and dependent claims 19 and 27 recite a writing device "wherein said determination unit determines the operation mode of said input unit based on a relative area of contact area."

Dependent claims 35 and 39 recite a computer-readable recording medium "wherein the determining determines the operation mode of said inputting based on a determining of a type of input device by determining a contact area formed by a contact of the input device with the surface of the input unit."

As discussed above in traverse of the rejection of claim 3, the cited art does not teach, nor does the Examiner contend that the art teaches, an operation mode based on a relative contact area.

In addition as submitted above, the cited art does not teach features of a writing device as recited by claims 19 and 27, or a method of detecting coordinates of a writing character as recited by claims 23 and 31.

**Conclusion**

Since features of dependent claims 7, 11, 15, 19, 23, 27, 31, 35 and 39 are not taught or suggested by the prior art, the rejection should be withdrawn, and dependent claims 7, 11, 15, 19, 23, 27, 31, 35 and 39 allowed.

**ITEM 3: REJECTION OF CLAIMS 4, 8, 12, 16, 20, 24, 28, 32, 36 and 40 UNDER 35 U.S.C. §103(a) OVER HIRAYAMA AND DUNTHORN IN VIEW OF FURUHATA ET AL. (U.S.P. 5,943,043)**

The Examiner rejects claims 4, 8, 12, 16, 20, 24, 28, 32, 36 and 40 under 35 U.S.C. §103(a) over Hirayama and Dunthorn "as applied to claims 1 and 5 above" and further in view of Furuata. (Action at page 5).

Dependent claims 4, 12, 20 and 28 recite a detection device, and a writing device, respectively, "wherein said determination unit determines the operation mode of said input unit based on a time during which the input device is detached from the surface of said input unit." Dependent claims 8, 24, and 36 recite a method and a computer-readable recording medium "wherein said determining determines the operation mode of said inputting based on a time

during which the input device is detached from the surface of the input unit."

Dependent claims 16, 32, and 40 recite a method and a computer-readable recording medium, wherein "the determining (is) based on a time between the first inputting and the second inputting."

The Action concedes that Hirayama and Dunthorn do not teach:

determining the operation mode of the input unit based on a time during which the input means is detached from the surface of the input unit.

(Action at page 5).

However, the Examiner contends that Furuhashi teaches wherein an "action taking in the device is based on the time." The Examiner contends it would have been obvious:

to make the changing mode of the device based on the time, to be included in the Hirayama's device so as to provide an accurate output based on the user's determination.

(Action at page 5).

**No Reasonable Expectation of Success Stated Within the Cited Art To Combine In The Manner Proposed By The Examiner**

As provided in MPEP §2143 entitled Basic Requirements of a *Prima Facie* Case of Obviousness:

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant submits that the Examiner's contention is unsupported, and there is no reasonable expectation of success even if such a modification was made. There is no showing of an incentive or motivation to modify Hirayama teaching of a data processing apparatus "in which information is input by using a pen" (See col. 1, lines 9-10) with teachings of Furuhashi directed toward "touch input systems using fingers (that) do not require special devices, such as a pen (See col. 2, lines 48-50)" in a manner suggested by the Examiner or for any other reason.

In addition as submitted above, the cited art does not teach features of a writing device as recited by claims 20 and 28, or a method of detecting coordinates of a writing character as recited by claims 24 and 32.

**Conclusion**

Since the Examiner's contention is unsupported and features of the claims not taught by the recited art, the rejection should be withdrawn and dependent claims 4, 8, 12, 16, 20, 24, 28, 32, 36 and 40 allowed.

**CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the

application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: August 17, 2004

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